

DELIVERING OUTCOMES FOR COMMUNITIES CASE STUDY: RELATIONSHIP BUILDING AND TECHNICAL ASSISTANCE **DETROIT, MICHIGAN (2011-2014)**

COMMUNITY SNAPSHOT

- 2010 Population: 713,862
- 2013 Crime rate = 4x the national average
- 2013 Filed for Chapter 9 bankruptcy on July 18th
- 2014 Unemployment Rate: 14.5%

THE CHALLENGE

In 2011, the lack of financial resources, staff shortages, theft and a deteriorating infrastructure left less than 50 percent of the Detroit's 88,000 streetlights non-operational. The city-wide poorly lit areas became hot spots for illegal activity, threatening citizen safety. Detroit was going dark – literally and in spirit.

In February 2013, the Detroit City Council voted to approve the Public Lighting Authority (PLA) articles of incorporation, taking advantage of a Michigan law passed in 2012, allowing lighting authorities in Michigan cities.

As part of the pilot Strong Cities, Strong Communities (or SC2) team embedded within the city, the U.S. Department of Energy (DOE) approached the PLA to offer technical assistance. DOE proposed a plan to update Detroit's old lighting system with advanced lighting technology, but the PLA was primarily concerned with quickly finding funding to rebuild the system with the same outdated lighting technology.

PARTNERS

- U.S. Department of Energy (DOE)
 - Office of Energy Efficiency & Renewable Energy (EERE)
 - Building Technology Office's Municipal Solid-State Street Lighting Consortium (MSSLC) out of the Pacific Northwest National Laboratory (PNNL)
- City of Detroit
 - Mayor Dave Bing (2009-2013) and Mayor Mike Duggan (2014-present)
 - Public Lighting Authority (PLA) & DTE Energy (their project manager)
 - City of Detroit's Group Executive for Operations

EXERCISE

In 2011, President Obama sent a team to Detroit from various agencies as part of the pilot of Strong Cities, Strong Communities (or SC2). The DOE representative to the working group learned that the city was using outdated, inefficient and costly streetlight technology, because they lacked the capacity and technical expertise to consider alternatives.

In your assigned small groups, please discuss:

- What is the first thing you would do to understand the community's needs?
- What are the current challenges and anticipated barriers? What approach can you take to overcome them?
- What federal agencies and resources should come into play?
- What would be important to support long-term sustainability of the project outcomes? What could be recommended as broader policy or program changes across the government?

ACTUAL STEPS TAKEN

1. The DOE representative of the DFWG, a Detroit expat, called the newly established PLA executive director to introduce herself. She brought to the table professional expertise, a personal history with the city and passion for helping Detroit get back on its feet. She shared the steps DOE had taken regarding Detroit's streetlight crisis, and explained that the DOE was prepared to advise the PLA on implementing new technology to repair the old system. Gradually, she built trust and strong relationships with the local partners and the PLA board.
2. Detroit had already received a plan from the local utility—who also served as the program manager for the PLA—that proposed replacing the whole system based on the existing high pressure sodium technology. While it was evident the PLA Board's priority was to obtain funds to move forward quickly on this existing plan, DOE saw an opportunity for Detroit to consider implementing new technologies, given the right technical support. DOE's Municipal Solid-State Street Lighting Consortium (MSSLC) is a resource for evaluating new technologies on the market intended for applying advanced lighting technology conversion (in this case, LEDs) to street and area lighting. The MSSLC was prepared to walk the PLA through the technical details as the PLA did not have the internal technical capacity to consider alternative technologies.
3. With the end goal in sight, DOE provided Detroit \$103,000 in funding for hands-on technical assistance from the MSSLC to develop the technical specifications for the city's lighting procurement.
4. DOE's MSSLC continued to attempt to provide the PLA with technical support, and eventually brought in several experts, as well as residents of cities that had undergone LED conversion. The MSSLC met with the City of Detroit's group executive for operations, toured the city together and provided advice based on their experience. The MSSLC then developed a one-page document that laid out the benefits of converting to LED, including a lower carbon footprint and an anticipated \$3 million in annual savings. The DOE official provided this information to Detroit's executive for operations; he understood that a strategy for a new technical system would have long-term cost benefits that would help efficiently fund the project. This information was provided to the Mayor.
5. With expert assistance from the MSSLC, the PLA co-wrote the technical specification plan to replace the prior high-pressure sodium system with new high-performance streetlights using LEDs. Not every DOE recommendation was incorporated; it was understood that PLA had the

final say, and that the city's bankruptcy and budget issues drove certain decisions. The Mayor supported the plan.

UNIQUE OUTCOMES

- After DOE provided direct technical assistance to PLA and the Mayor's senior staff, the Mayor was able to champion advanced lighting with the PLA and the local utility.
- As of today, it is estimated that 62,000 LEDs have been installed and that the remaining 3,000 will be installed by the end of 2016, completing the relighting of Detroit.
- Detroit's neighborhood streets are illuminated by energy efficient technology, nearly a year ahead of schedule. Major thoroughfares are next. Upon completion of the restoration, the estimated savings to the city are \$2.94 million annually in electricity costs, and 45.6 million kilowatt-hours in energy. An estimated 41 tons of nitrogen oxide will be reduced, along with 40,418 tons of carbon dioxide and 1.5 pounds of mercury. The predicted emissions reductions are equivalent to the annual emissions from 10,993 passenger vehicles.
- The relighting of Detroit is an important symbol of the city's turnaround and the effectiveness of federal-local partnerships. The outcomes illustrate how patient and persistent collaboration efforts paid off for Detroit communities far beyond this one issue, resulting in sustainable solutions for a multitude of critical needs. For example, the federal team also urged the development of a regional transit administration as a condition of receiving Transportation Investment Generating Economic Recovery (TIGER) grants for the new M-1 rail that connects the downtown and mid-town corridors. This engagement helped inspire the creation of a Regional Transportation Authority, a long-sought goal of transportation planners.
- The collaboration also had an impact on DOE's culture. DOE is now scaling up its efforts to offer technical assistance to state and local governments and has proposed a new Cities, Counties and Communities Energy Program in the President's FY17 budget.

DISRUPTING AN OUTDATED WAY OF DOING BUSINESS:

- In 2013, after the bankruptcy, President Obama appointed a singular point-person to work with members of his Cabinet to uncover resources to help Detroit.
- In 2015, the Detroit Federal Working Group (DFWG), a table of over twenty agencies began gathering monthly to identify creative solutions to tough local problems.
- In this challenging environment, the DFWG was charged with assisting the city of Detroit to achieve both its short, and long-term development goals. The group embedded themselves in Detroit's City Hall and worked hand-in-hand with the Mayor, members of Obama's Cabinet, and local community stakeholders.
- Since its inception, the DFWG has expanded to include a half dozen deputies, and is currently working under the direction of its second executive director. More than twenty federal agencies meet together monthly, striving for a one-government approach to improving conditions in Detroit.
- Today, the DFWG is working to provide a "one-government" approach, bringing federal resources and expertise across 20 agencies together to support Detroit.

UNIFYING THEMES

- Detroit taught us how to do our business better—not the other way around.
- Sometimes good ideas do not work out when they are first proposed, but can gain traction over time. When proposing ideas, you should look beyond the initial ask to understand the full scope of the local challenge and potential opportunities to assist, rather than allowing an initial “no” to be the end of the conversation.
- Data analysis showing the long-term benefits of a solution can impact decision making.
- Taking the time to build strong personal relationships with local partners can set the stage for effective collaboration.
- Monitoring changes in the local landscape (e.g., mayoral election, creation of new administrative entity like the Public Lighting Authority) can lead to identification of opportunities for collaboration.
- Matching community needs with the appropriate available federal resources is key to receiving assistance from the federal government.
- The recipe for success:
 1. Capacity: Sustained on-the-ground capacity for long-term strategic thinking and identifying blind spots
 2. Technical assistance: “Your TA is more valuable to me than your money.” – Gary Brown, COO at the time of Detroit’s bankruptcy
 3. Resources: Where federal money was allocated and not utilized, the SC2, NEC and DFWG teams made sure that it was not only spent in a timely fashion but also in a wise fashion, and identified other resources and technical assistance from across the government.

FEATURED HIGH-VALUE RESOURCES FOR COMMUNITIES

1. Municipal Solid-State Street Lighting Consortium (MSSLC): <http://1.usa.gov/1pOx11r>
2. Energy Efficiency & Renewable Energy Announcement of Technical Assistance, Office of Energy Efficiency and Renewable Energy: <http://1.usa.gov/1Q9J0nE>

LINKS TO NEWS ARTICLES/MEDIA/OTHER RESOURCES

“Crackdown in a Detroit Stripped of Metal Parts”, New York Times, March 15, 2015: <http://nyti.ms/1YWhv0O>

White House Fact Sheet on Detroit work: <http://1.usa.gov/1N6HWQQ>

Remarks by the President on the Economy of Detroit, MI, January 20, 2016: “Starting five years ago, I sent some of my top people across the federal government to help city hall and ordinary citizens to spark that comeback here in the Motor City. So today you’ve got buses that are running again, streets that are well-lit again, new homes and businesses getting off the ground again. There’s still plenty of work to do, but you can feel the difference. You can feel something special happening in Detroit.” – President Obama: <http://1.usa.gov/20htPuf>

Detroit Dashboard: (Note the LEDS are the lead metric!): <http://bit.ly/1InA3iC>